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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/597,236

06/20/2000

Akihiko Yagasaki

37174:164287

5862

26694

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04/23/2004

VENABLE, BAETJER, HOWARD AND CIVILETTI, LLP  
P.O. BOX 34385  
WASHINGTON, DC 20043-9998

EXAMINER

NGUYEN, TUYEN T

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 04/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

34.

## Office Action Summary

### Application No.

09/597,236

### Applicant(s)

YAGASAKI, AKIHIKO

### Examiner

TUYEN T NGUYEN

### Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

In view of the Appeal Brief filed on 11/07/03, PROSECUTION IS HEREBY REOPENED. The office action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 27, applicant should clarify what is intended by “short-circuit *ring*”. Applicant should clarify the structure/arrangement of the “ring” structure relative to the copper wire.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLoughlin [US 4,484,171] in view of Harada [US 4,518,941].

McLoughlin discloses an isolation transformer [see figure 7a] comprising:

- a multi-layer, multi-winding primary coil [24] fabricated by stacking coil layers formed by an insulated covered conductor;
- a multi-layer, multi-winding secondary coil [26] fabricated by stacking coil layers formed by an insulated covered conductor;
- a core structure [58]; and
- a conductive short-circuit means [28] disposed between the primary and secondary coils.

McLoughlin discloses the instant claimed invention except for the short-circuit means being made of a thin conductive film sandwiched between the coil layers.

Harada discloses a transformer comprising thin conductive foil shielding means [8, 8', 9, 9'] disposed between a plurality of coil layers [3, 3', 4].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the shielding means arrangement in McLoughlin for the purpose of providing equipotential between the windings.

Regarding claims 19-20, 22-23 and 25-26, Harada discloses the conducting layer sandwiched between each or selected coil layers.

Regarding claims 21 and 24, the particular design of the primary and secondary windings would have been an obvious design consideration based on the intended application.

Claim 27, as best understood in view of the rejection under 35 USC 112 second paragraph, is rejected under 35 U.S.C. 103(a) as being unpatentable over Scarpa [US 2,817,066] in view of Harada.

Scarpa discloses a transformer [figure 5] comprising:

- primary and second coils [A and B] formed of a plurality of conductors [2, 3] covered with insulating layer [2', 3'];
- a core structure [C]; and
- at least one "*short-circuit ring*" [2", 3"] formed of a conductive material disposed on the insulating layer.

Scarpa discloses the instant claimed invention except for the conductive "*short-circuit ring*" being a thin conducting film.

Harada discloses a transformer comprising thin conductive foil shielding means [8, 8', 9, 9'] disposed between a plurality of coil layers [3, 3', 4].

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use the thin conductive foil design of Harada for the conductive "*short-circuit ring*" of Scarpa for the purpose of reducing the size of the device.

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***Response to Arguments***

Applicant's arguments with respect to claims 18-27 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T NGUYEN whose telephone number is 571-272-1996. The examiner can normally be reached on M-F 8:30-6:30.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTN TTN

*Tuyen Nguyen*